

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A device comprising:
 - an emitter electrode;
 - a resistor layer;
 - an electrically conductive seed layer overlying part of the resistor layer, the seed layer including a plurality of laterally separated unconnected sections;
 - a dielectric layer overlying the resistive layer;
 - a gate electrode overlying the dielectric layer above the resistive layer and having lateral edges in approximate vertical alignment with lateral edges of the dielectric layer; and
 - a plurality of carbon based electron-emissive elements (a) positioned over the sections of the seed layer above the emitter electrode and (b) situated in a composite opening extending through the gate electrode and the dielectric layer.

2. (Previously presented) A device comprising:
 - an emitter electrode;
 - an electrically resistive layer overlying at least a portion of the emitter electrode;
 - a dielectric layer overlying the resistive layer;
 - a plurality of laterally separated gate electrodes overlying the dielectric layer above the resistive layer; and
 - for each gate electrode, a multiplicity of electron-emissive elements (a) grown from a seed layer that includes a plurality of unconnected sections above the emitter electrode and (b) situated in composite openings extending through the gate electrode and the dielectric layer.

3. (Original) A device as in Claim 2 wherein the dielectric layer comprises a dual layer of silicon nitride and silicon dioxide.

4. (Previously presented) A device as in Claim 2, wherein the dielectric layer comprises a single layer of silicon nitride.

5. (Previously presented) A device as in Claim 2, wherein the dielectric layer comprises a single layer of silicon dioxide.

6. (Original) A device as in Claim 2 wherein the multiplicity of electron-emissive elements comprise carbon.

7. (Original) A device as in Claim 6 wherein the multiplicity of electron-emissive elements are filaments.

8-9. (Canceled)

10. (Previously presented) A device as in Claim 2, wherein the electron-emissive elements positioned over at least two sections of the seed layer defines a single pixel of a display system.

11. (Previously presented) A device as in Claim 10, wherein the electron-emissive elements are allocated into a number of laterally separated sets, each set comprising multiple electron-emissive elements overlying at least one of the sections of the seed layer.

12. (Canceled)

13. (Currently amended) An electron-emitting device comprising:
an emitter electrode;
a gate electrode;
a plurality of groups of electron-emissive elements situated in one or more openings in the gate electrode; and

a seed layer including at least two laterally separated unconnected sections, each section of the seed layer electrically coupled between one or more of the plurality of groups of electron-emissive elements and the emitter electrode.

14. (Previously presented) The device of claim 13, further comprising:
an electrically resistive layer overlying at least a portion of the emitter electrode, the electrically resistive layer electrically coupled in series between the emitter electrode and the seed layer.
15. (Previously presented) The device of claim 14, further comprising:
a dielectric layer disposed between the electrically resistive layer and the gate electrode.
16. (Previously presented) The device of claim 15, wherein the dielectric layer comprises silicon nitride.
17. (Previously presented) The device of claim 15, wherein the dielectric layer comprises silicon dioxide.
18. (Previously presented) The device of claim 15, wherein the dielectric layer comprises a layer of silicon nitride and a layer of silicon dioxide.
19. (Previously presented) The device of claim 13, wherein the electron-emissive elements comprise carbon.
20. (Previously presented) The device of claim 13, wherein the electron-emissive elements comprise a number of carbon filaments.
21. (Previously presented) The device of claim 13, wherein the sections of the seed layer symmetrically over-align with the openings of the gate electrode.

22. (Previously presented) The device of claim 13, wherein multiple sections of the seed layer correspond to a single pixel of a display system.

23. (Previously presented) The device of claim 13, wherein multiple sections of the seed layer correspond to a single color for a pixel of a display system.